

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Freyne, Eddy J. et al.

Serial No.: 10/596,509

Art Unit: 1624

Filed

: December 15, 2004

Examiner:

For

: 3-CYANO-QUINOLINE DERIVATIVES WITH

ANTIPROLIFERATIVE ACTIVITY

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November 2, 2006
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Alana G. Kriegsman (Name of applicant, assignee, or Registered Representative)

/Alana G. Kriegsman/
(Signature)

November 2, 2006

(Date of Signature)

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Pursuant to 37 C.F.R. §1.56 and in accordance with 37 C.F.R. §§1.97-1.98, information relating to the above-identified application is hereby disclosed. Inclusion of information in this statement is not to be construed as an admission that this information is material as that term is defined in 37 C.F.R. §1.56(b).

Applicant(s) reserve(s) the right to establish the patentability of the claimed invention over any of the information provided herewith, and/or to prove that this information may not be prior art, and/or to prove that this

information may not be enabling for the teachings purportedly offered.

This statement should not be construed as a representation that a search has been made, or that information more material to the examination of the present patent application does not exist.

 \boxtimes In accordance with §1.97(b), since this Information Disclosure Statement is being filed either within three months of the filing date of the above-identified national application (other than a continued prosecution application under §1.53(d)), within three months of the date of entry into the national stage of the above identified application as set forth in §1.491, or before the mailing date of a first Office Action on the merits of the above-identified application, or before the mailing date of a first Office Action after the filing of a request for continued examination under §1.114, no additional fee is required. In accordance with §1.129(a), this Information Disclosure Statement is being filed in connection with _ the first or second After Final Submission, therefore: Statement in Accordance with §1.97(e) (attached); or Please charge Deposit Account No. 10-0750/ the fee of \$180.00 as set forth in §1.17(p).

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1449 are enclos	sed herewith EXCEPT THAT:
	In view of the voluminous nature of references
	[list as appropriate], and the likelihood that
	these references are available to the Examiner,
	copies are not enclosed herewith.
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	available to the Examiner, Applicant will
	endeavor to supply copies at the Examiner's
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patent literatu	re are enclosed in accordance with 37 CFR 1.98
(a)(2).	

There are no listed references which are not in the \boxtimes English language. The relevance of those listed references which are not in the English language is as follows: \boxtimes Attached are copies of search report(s) from corresponding patent application(s), which are listed on the attached Submission Under MPEP 609 D. Attached are the following non-published pending patent applications which may be deemed relevant, which are listed on the attached Submission Under MPEP 609 D. Please charge any deficiency or credit any overpayment to Deposit Account No. 10-0750/PRD2168USPCT/AGK. This form is submitted in triplicate. Respectfully submitted, /Alana G. Kriegsman/ Alana G. Kriegsman Req. No. 41,747 Attorney for Applicants

Johnson & Johnson One Johnson & Johnson Plaza New Brunswick, NJ 08933-7003 (732) 524-1495

DATED: November 2, 2006

PTO/SB/08A (08-00)
Approved for use through 10/31/2002. OMB 0651-0031
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LIS DATENT DOCUMENTS

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)
Sheet 1 of 2

Application Number	10/596,509
Filing Date	12/15/2004
First Named Inventor	Eddy J. Freyne
Group Art Unit	1624
Examiner Name	
Attorney Docket Number	PRD2168USPCT

	Cite No. ¹	U.S. Patent Do	cument				
Examiner Initials		Number	Kind Code ² (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document mm-dd-yyyy	Pages, Columns, Lines, where relevant passages or relevant figures appear	
		6002008		American Cyanamid Company	12-14-1999		
		6288082		American Cyanamid Company	09-11-2001		
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FOREIGN PATENT DOCUMENTS Pages, Columns, Lines, Foreign Patent Document **Date of Publication** where relevant of Cited Document Name of Patentee or passages or relevant Examiner Cite mm-dd-yyyy Applicant of Cited Document figures appear KindCode⁵ Initials Number⁴ Office³ No.¹ 98/043960 WO American Cyanamid Company 10-08-1998 American Cyanamid Company 04-06-2000 WO 00/018761 Boehringer Ingelheim (English WO 03/082290 10-09-2003 Abstract on front page) 12-09-2004 WO 04/105765 Janssen Pharmaceutica

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Sheet 2 of 2

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Application Number	10/596,609
Filing Date	12/15/2004
First Named Inventor	Eddy J. Freyne
Group Art Unit	1624
Examiner Name	
Attorney Docket Number	PRD2168USPCT

		OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS	
Examiner's	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
		BROWN et al., "High Throughput Screening", 1997, editors: Devlin, John P., Publishers: Dekker, New York, N.Y., pages 317-328.	
		BURKE, Terrence R. Jr., "Protein-tyrosine Kinase Inhibitors", Drugs of The Future, 1992, pages 119-131, Vol. 17, No. 2.	
_		DAVIES et al., "Specificity and Mechanism of Action of Some Commonly Used Protein Kinase Inhibitors", <u>Biochemical Society</u> , 2000, pages 95-105, Vol. 351.	
		DELIA, Thomas, "Fused Pyrimidines, Part Four, Miscellaneous Fused Pyrimidines: Chapter VI-Pyrimidotriazines.", Heterocyclic Compounds, John Wiley & Sons, Inc., Interscience Publications, pages 261-304.	
"		DRUKER et al., "Lessons Learned From The Development of An Abl Tyrosine Kinase Inhibitor For Chronic Myelogenous Leukemia", The Journal of Clinical Investigation, January 2000, pages 3-7, Vol. 5, No. 1.	
		ELDER et al., "Overexpression of transforming growth factor alpha in psoriatic epidermis", <u>Science</u> , 1989 , pages 811-814, Vol. 243.	
		GENNARO et al. Remington's Pharmaceutical Sciences, 19 th ed., Mack Publishing Company, 1990 , see especially Part 8: Pharmaceutical preparations and their Manufacture,.	
		GREENE et al., "Protective Groups in Organic Synthesis", 2 nd edition, Wiley Interscience, 1991.	
		HENNEQUIN, et al.: "Novel 4-Anilinoquinazolines with C-7 Basic Side Chains: Design and Structure Activity Relationship of a Series of Potent, Orally Active, VEGF Receptor Tyrosine Kinase Inhibitors", <u>Journal of Medicinal Chemistry</u> , March 14, 2002, pages 1300-1312, Vol. 45, No. 6, American Chemical Society, Washington, US, XP002256124.	
		MORIN, Michael J., "From Oncogene to Drug: Development of Small Molecule Tyrosine Kinase Inhibitors as Anti-tumor and Anti-angiogenic Agents", Oncogene, 2000, pages 6574-6583, Vol. 19.	
		NAGAMATSU et al., "Sytheses of 3-Substituted 1-Methyl-6-Phenylpyrimido[5,4-e]-1,2,4-triazine-5,7(1 <i>H</i> ,6 <i>H</i>)-diones (6-Phenyl Analogs of Toxoflavin) and Their 4-Oxides, and Evaluation of Antimicrobial Activity of Toxoflavins and Their Analogs.", Chem Pharm Bull., 1993, pages 362-368, Vol 41, No. 2.	
		NAGAMATSU et al., "General Syntheses of 1-Alkyltoxoflavin and 8-Alkylfervenulin Derivatives of Biological Significance By The Regioselective Alylation of Reurnycin Derivatives And The Rates of Transalkylation From 1-Alkyltoxoflavins Into Nucleophiles.", J. Chem. Soc. Perkin Trans. 1, 2001, pages 130-137.	
		PALMER, B.D. et al.: "Tyrosine Kinase Inhibitors 11 Soluble Analogs of Pyrrolo-and Pyrazoloquinazolines as Epidermal Growth Factor Receptor Inhibitors: Synthesis, Biological Evaluation, and Modeling of the Mode of Binding", <u>Journal of Medicinal Chemistry</u> , 1997, pages 1519-1529, Vol. 40, No. 10, American Chemical Society, Washington, US, XP002094613.	
		SHAWVER et al., "Smart Drugs: Tyrosine Kinase Inhibitors In Cancer Therapy", Cancer Cells, March 2002, pages 117-123, Vol 1.	
		WISSNER et al., "4-Anilino-6,7-dialkoxyquinoline-3-carbonitrile Inhibitors of Epidermal Growth Factor Receptor Kinase And Their Bioisosteric Relationship To The 4-Anilino-6,7-dialkoxyquinazoline Inhibitors", <u>Journal of Medicinal Chemistry</u> , 2000 , pages 3244-3256, Vol. 43, No. 17, American Chemical Society, Washington, US.	
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Examiner	Date
Signature	Considered

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SUBMISSION UNDER MPEP 609 D

Application Number10/596,509Filing Date12/15/2004First Named InventorEddy J. FreyneGroup Art Unit1624Examiner NamePRD2168USPCT

Page 1 of 1

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